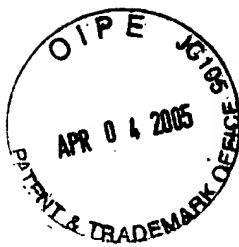


32692

Customer Number



09, 687, 605

Patent  
Case No.: 56768US006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

First Named Inventor: JOHNSON, JERRY L.

Patent No.: 6677922

Group Art Unit: 2675

Dated: January 13, 2004

Examiner: Chanh Duy Nguyen

Title: DISPLAY ELEMENT HAVING RETROREFLECTIVE SURFACE

**REQUEST FOR RECONSIDERATION OF CERTIFICATE OF CORRECTION UNDER 37**  
**CFR § 1.322 AND 1.323**

Attn: Decisions & Certificates of  
Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:	
April 1, 2005	
Date	Signed by: Sherri K.W. Johnson

Dear Sir:

It is respectfully requested that a Request for Reconsideration of the Certificate of Correction filed on July 13, 2004 be reconsidered in connection with the above-identified patent. The required text is submitted on the attached form. Also enclosed is a copy of the Form 892 which was submitted by the Examiner on May 31, 2002 along with a copy of the Examiner's Office Action.

This paperwork substantiates that the reference(s) listed on the attached Certificate of Correction should appear on the patent and that the error of omitting the reference(s) on the printed patent is attributed solely to the USPTO.

Because the listed errors first occurred in the printed patent, and are not due to Applicant's mistake, no fee is required in connection with this Certificate of Correction.

Respectfully submitted,

March 31, 2005  
Date

By: James V. Lilly  
James V. Lilly, Reg. No. 27,817  
Telephone No.: (651) 733-1543

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO.: 6677922  
DATED: January 13, 2004  
FIRST NAMED INVENTOR: JOHNSON, JERRY L.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

First Page

Column 2, (U.S. Patent Documents), Line 38, insert - - 5,790,088 \* 08-  
1988 Johnson et al. 348/108 - - as a new entry.

MAILING ADDRESS OF SENDER:

**OFFICE OF INTELLECTUAL PROPERTY COUNSEL  
3M INNOVATIVE PROPERTIES COMPANY  
3M CENTER - P.O. BOX 33427  
SAINT PAUL, MINNESOTA 55133-3427**

PATENT NO. 6677922

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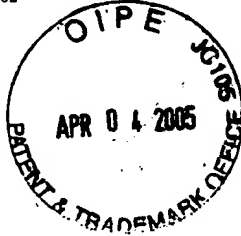
UNITED STATES PATENT AND TRADEMARK OFFICE

56768 US006  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,605	10/12/2000	Jerry L. Johnson	AM19-013	2562

21567 7590 05/31/2002

WELLS ST. JOHN P.S.  
601 W. FIRST  
SUITE 1300  
SPOKANE, WA 99201-3828



EXAMINER

NGUYEN, CHANH DUY

ART UNIT PAPER NUMBER

2675

DATE MAILED: 05/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

DUE DATE (\$)	8/31/02
ATTORNEY	JVL
DOCKETED BY	JVL

58

# Office Action Summary

Application No.

09/687,605

Applicant(s)

JOHNSON ET AL.

Examiner

Chanh Nguyen

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 12 October 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 31-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 & 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Preliminary Amendment***

1. The preliminary amendment filed on March 13 2002 has been entered and consider by examiner.

### ***Information Disclosure Statement***

1. The references listed on the Information Disclosure Statement filed on February 07, 2002 and March 13, 2002 have been considered by examiner; see attached PTO-1449.

### ***Specification***

2. The abstract of the disclosure is objected to because of legal phraseology. Applicant should avoid using legal phraseology in patent claims, such as means recited in lines 10 and 12, as required. See MPEP § 608.01(b).

### ***Obvious Type Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 31-70 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 5,790,088 in view of Huber et al (U.S. Patent No. 5,500,652).

Claims 1-7 of U.S. Patent No. 5,790,088 discloses a pixel for use in a visual matrix display as recited claims 31-70 of the invention with exception of describing the limitation a plurality of cube prisms. Huber teaches the use of cubes (54) described on column 4, lines 28-40. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the cube prisms as taught by Huber to the claims of U.S. patent No. 5,790,088 so as to improve both back legibility and reflectively.

5. Claims 31-70 are rejected under the judicially created doctrine of double patenting over claims 1-7 of U. S. Patent No. 5,790,088 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: the claims of the patents defines a pixel for use in a visual matrix display a first retroreflector, a light source, a pivotable flap, a second retroreflective surface (see claim 1 of U.S. Patent No. 5,790,088) , especially a limitation plurality of cube prism described column 4, lines 23-35 disclose the claimed invention of the above specified claims.

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Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 37-43, 47-48, 55-57 and 66-68 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claims 37 and 47 recite "the aperture is not retroreflective". However, no where in the specification describes or states the limitation above. It is noted that the negative limitation should not be claimed if the specification does not support the negative claimed limitation.

Dependent claims 55 and 66 recite "a pivotable flap having a layer of cube prism elements disposed on the flap". No where in the specification or figures describes or shows the layer of cube prism disposed on the flap.

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The remaining claims are rejected to as being dependent upon a rejected base claim.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 31-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "an axis normal of the plane of the first retroreflective surface" and "an axis of pivot located generally parallel to the plane of the first retroreflective surface" in claims 31, 37, 44, 47, 49 and 60 is a relative term which renders the claim indefinite. The specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. First, the term "plane" does not even mention in the specification or shows in the drawings. Secondly, even the term "plane" is well-known term, but the specification or does not describe the limitation "each face of each cube prism has an angle relative to an axis normal to the plane of the first retroreflective surface" and the limitation "the selectively pivotable flap having an axis of pivot located generally parallel to the plane of the first retroreflective surface". Page 9, lines 10-21 of the specification is only page to describe the angles between the cube prisms are formed, not the angle between the cube prisms and the surface of retroreflective surface as claimed.



***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 31-34, 36-40, 42, 44-51, 54-62 and 65-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Hu8ber et al (U.S. Patent No. 5,500,652).

As to claim 31, Huber discloses a pixel for use in a visual matrix display including a first retroreflector (12) having a generally planar first retroreflective surface, wherein the pixel is substantially opaque at the first retroreflective surface, the first retroreflector having an aperture; see column 2, lines 10-13. Huber teaches the first retroreflector (12) including a plurality of cube prisms (54) such that each cube prism has a plurality of adjacent faces, where each face of each cube prism has an angle relative to an axis normal to the plane of the first retroreflective surface, the angles for each cube prism averaging about 35 degrees; see column 4, lines 21-39. It is noted that the arrangement of the cube prisms described on page 9, lines 10-21 of the specification is the same way as Huber disclosed on column 4, lines 21-40.

Huber teaches a light source received in the aperture (132) (see column 2, lines 34-37), a selectively pivotable flap (150) having a second opaque retroreflective surface (see column 3, lines 13-17. Huber teaches the selective pivotable flap (150) having an axis of pivot located generally parallel to the plane of the first retroreflective surface. It is noted that the arrangement of pivotable flap (150) of Huber is the same way as the

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arrangement of the flap described in the specification of the invention. Huber teaches the selectively pivotable flap being adapted to travel between the first position where the selectively pivotable flap covers the light source and a second position where the light source and second rereflective surface are exposed; see column 3, lines 13-21.

As to claim 37, this claim differs from claim 31 only in that the limitation "aperture is not retroreflective" is additional recited, and the term "received in the aperture" recited in claim 31 is changed to the term "visible in the aperture". First, both Huber and the specification of the invention never discuss about the "aperture is retroreflective", thus it is inherent that if the aperture of the invention is not retroreflective, then neither the aperture of Huber is. Secondly, the arrangement of light source to the aperture of the invention is the same way as Huber (see figures 2, 4 and 5 of both Huber and the invention); thus if the light source of the invention is visible in the aperture, then the light source of Huber can be visible in the aperture too.

As to claim 44, this claim differs from 31 only in that the limitation "a panel adapted to receive a plurality of pixels" is additional recited. Huber clearly teaches a plurality of pixels (display elements 14).

As to claim 47, this claim differs from claim 37 in that the limitation "a panel adapted to receive a plurality of pixels" is additional recited. Huber clearly teaches a plurality of pixels (display elements 14). Thus, this claim is analyzed as previously discussed with respect to claims 31 and 37 above.

As to claim 49, this claim is broader than claim 31 since claim 49 does not recite the limitations a first retroreflective surface, a second retrorefletive surface, a selectively

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pivotable flap as claim 31 does. The claimed limitation "a layer of cube prism elements having a second aperture" is so broad that it reads on the display element (130) including frame (138), a plurality of lenses (30) and an aperture on frame (138) to hold the lenses (30).

As to claim 60, this claim differs from claim 49 only in that the preamble claim 60 does not recite the limitation "a pixel". Thus, this claim is broader than claim 49 and analyzed as previously discussed with respect to claim 49 above.

As to claim 32, Huber clearly teaches the angles for each cube prism approximately 35 degrees; see column 4, lines 28-32.

As to claims 33, 39, Huber teaches the first retroreflector being opaque; see column 2, lines 11-12.

As to claims 34, 40, 59, Huber teaches the light source including a light discharge end disposed forward of the first retroreflective surface (12); see column 2, lines 34-37.

As to claims 36, 38, 42, 54 and 65, Huber clearly teaches means (168) for moving the selectively pivotable flap between the first position and the second position; see column 3, lines 22-30.

As to claims 45-46, both Figure 2 of the invention and Huber's reference are duplicate. Thus, the claimed limitations "the first retroreflector is attached directly to the panel" recited in claim 45 and "the first retroreflector is disposed within a frame, and the panel mating receives the frame" recited in claim 46 are met by Huber.

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As to claims 48 and 70, Huber clearly teaches means to selectively energize the light source (42).

As to claims 50, 57, 61 and 68, Huber clearly teaches opposing faces of adjacent cube prism oriented at about 90 degrees to one another; see column 4, lines 28-39.

As to claims 51 and 62, the claimed limitation "a plurality of aligned aperture" reads on the apertures as taught by Huber; see column 2, lines 35-37.

As to claims 55 and 66, these claims are met by Huber as best understood. That is the limitation "a pivotable flap having a layer of cube prism disposed on the flap" is interpreted as one side of the flap positioned approximate close to the layer of cube prism.

As to claims 56 and 67, Huber teaches the flap (150) being opaque; see column 2, lines 19-20.

As to claims 58 and 69, Huber clearly teaches the rigid element remaining substantially stationary.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 35, 41, 53 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber in view of Norfork (U.S. Patent No. 4,974,353).

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As to claim 35, 41, 53 and 64, note the discussion of Huber above, Huber does not mention light source being a light emitting diode. In the same field of endeavor, Norfork teaches using different kind of light sources including light emitting diode; see column 1, lines 51-53. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have substituted the light emitting diode of Norfork to the light source of Huber because light emitting diode generates less power than any light source else.

14. Claims 43, 52 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber in view of Browne (U.S. Patent No. 5,055,832)

As to claims 43, 52 and 63, note the discussion of Huber, Huber does not mention protrude through the rigid element and layer of cube prism. Browne teaches the light source (26) protruded through the flap member (38). Thus, combining Huber and Browne would result the light source of Huber protruding through the flap (150) via the rigid element (12) and cube prism (30). . Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the arrangement of the light source as taught by Browne to display elements of Huber so as to attract the motorist's attention by means of light source; see column 2, line 66 through column 3, line 3 of Browne.

### **Inquiries**

Art Unit: 2675

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

*CNV*  
C. Nguyen  
May 28, 2002

*Chanh Nguyen*  
CHANH NGUYEN  
PRIMARY EXAMINER

<b>Notice of References Cited</b>	Application/Control No. 09/687,605	Applicant(s)/Patent Under Reexamination JOHNSON ET AL.	
	Examiner Chanh Nguyen	Art Unit 2675	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,055,832	10-1991	Browne, John	340/815.42
	B	US-5,790,088	08-1998	Johnson et al.	345/108
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.